Remarks

I. Status of the Application and Claims

As originally filed, the present application had a total of 12 claims. These were all previously cancelled and replaced with claims 13-22. New claims 23-26 were added in a previous response. In response to the final Office Action dated June 12, 2007, Applicant filed an Amendment and Response Under 37 C.F.R. § 1.116 on September 28, 2007 amending claims 13, 23, and 25. According to the Advisory Action dated October 22, 2007, the September 28, 2007 response will be entered for purposes of Appeal. Applicant filed a First Supplemental Response on March 14, 2008 that did not amend any of the claims.

In this Second Supplemental Response, Applicant has amended claim 25 such that claims 25 and 26 now depend from allowed claim 13, rather than from claim 24. Applicant has also amended claim 21 to delete the recitations of the pyc and thrE genes, such that claim 21 now recites only *Escherichia coli* genes. Additionally, Applicant has made a minor Amendment to claim 23 to clarify the nature of the recited PTS pathway. No new matter has been added.

Thus, claims 13-26 are pending in this patent application, of which claims 13-20 have been allowed. Because of Applicant's amendments, claims 25 and 26 should now also be allowable.

Applicant understands that because this application is under final rejection, entry of this supplemental response is at the discretion of the Examiner. However, Applicant respectfully submits that this response should be entered, as it will not require substantial additional consideration and will simplify the issues for appeal.

The Rejections

II. Rejection of Claims Under 35 U.S.C. § 112, Second Paragraph

On pages 4-5 of the final Office Action, the Examiner rejects claims 21 and 22 under 35 U.S.C. § 112, second paragraph, based on the allegation that Applicant has offered conflicting arguments concerning the scope of these claims. Applicant stands by the remarks made in the September 28, 2007 response. However, in order to simplify the issues for appeal, Applicant

has amended claim 21 to remove the recitations of the pyc gene and the thrE gene, which are from *Corynebacterium glutamicum*. Thus, claims 21 and 22 now recite only genes from *Escherichia coli*. For that reason, as well as those given in the previous response, Applicant submits that the rejection should be withdrawn.

III. Rejection of Claims Under 35 U.S.C. § 102

On pages 7-8 of the final Office Action, the Examiner makes two separate rejections under 35 U.S.C. § 102. In item 16, claims 23-24 and 26 are rejected as anticipated by Valle (US 2002/0155521) as evidenced by Blattner *et al.* (*Science* 277:1453-1474 (1997)). In item 17, these same claims are rejected under 35 USC § 102(a) as being anticipated by Hernandez-Montalvo *et al.* (*Biotechnol. Bioeng.* 83:687-694 (2003)) as evidenced by Blattner *et al.* and Lee *et al.* (*J. Bacteriol.* 185:5442-5451 (1997)). Both rejections are predicated on the Examiner's assertion that "any glucose transporter in the bacteria...is encompassed by the term 'PEP-dependent phosphotransferase pathway' by the broad and reasonable interpretation of the term."

In the First Supplemental Response filed on March 14, 2008, Applicant filed a certified translation of the priority document to obviate the rejection under § 102(a). In this response, Applicant has amended the recitation in claim 23 of "a PEP-dependent phosphotransferase (PTS) pathway" to read "the PEP-dependent phosphotransferase (PTS) pathway," so that the wording of the claim is in full accord with Applicant's position that there is only one glucose transport pathway in cells that is termed the PEP-dependent phosphotransferase pathway, and that that pathway does not include the galactose-proton symporter protein.

Accordingly, Applicant respectfully requests that the rejections be withdrawn.

Conclusion

If, in the opinion of the Examiner, a phone call may help to expedite the prosecution of this application, the Examiner is invited to contact the undersigned.

Respectfully submitted,

LAW OFFICE OF MICHAEL A. SANZO, LLC

By: /Andrew McAleavey, Reg. No. 50,535/

Andrew McAleavey Reg. No. 50,535

Direct Dial: 510-428-9778 Direct Fax: 510-295-2490

Michael A. Sanzo Reg. No. 36,912

Attorney for Applicant

Date: March 19, 2008 15400 Calhoun Drive, Suite 125 Rockville, Md. 20855 (240) 683-6165